WHAT IS CLAIMED IS:

1.   A method for processing a squelch table for optical network
applications, the method comprising:

    receiving a first cross-connection entry associated with a first cross-connection
and a first channel;

    generating a first squelch entry associated with the first channel in a first
squelch table associated with a first node, the first squelch table free from any squelch entry
associated with the first channel other than the first squelch entry;

    sending a first request message associated with the first cross-connection to a
second node, the second node being a neighboring node to the first node;

    if a first response message associated with the first cross-connection is
received at the first node in response to the first request message within a predetermined
period of time,

    processing information associated with the first response message;

    modifying the first squelch entry in response to at least information
associated with the first response message.

2.   The method of claim 1 wherein the first request message comprises a
source node identification field associated with a source node related to the first cross-
connection and a destination node identification field associated with a destination node
related to the first cross-connection.

3.   The method of claim 2 wherein the first request message further
comprises a message identification field associated with a message identification.

4.   The method of claim 3 wherein the message identification is related to
at least one selected from a group consisting of AD, DR, DA, DD, NO, and NS.

5.   The method of claim 3 wherein the first request message further
comprises a request/response field indicating the first request message being a request.

6.   The method of claim 5 wherein the first request message further
comprises a direction field associated with a direction related to the first request message,
wherein the direction is west or east.

1   7. The method of claim 6 wherein the first request message further

2 comprises a channel indicator associated with a channel identification corresponding to the

3 first squelch table.

1   8. The method of claim 7 wherein the first request message further

2 comprises a VT indicator associated with a VT identification corresponding to the first

3 squelch table.

1   9. The method of claim 1 wherein the first channel is a STS channel or a

2 VT channel.

1   10. The method of claim 1 wherein the modified first squelch entry

2 comprises complete squelch information associated with the first cross-connection.

1   11. The method of claim 1, and further comprising:

2   if the first response message is not received at the first node within the

3 predetermined period of time and the first request message is sent for more than a

4 predetermined number of times, sending a first alarm message indicating a failure to receive

5 the first response message;

6   if the first response message is not received at the first node within the

7 predetermined period of time and the first request message is sent for less than or equal to a

8 predetermined number of times, sending the first request message to the second node.

1   12. The method of claim 11, and further comprising:

2   processing information associated with a first ring map related to the first

3 node;

4   determining whether the first ring map is complete based on at least

5 information associated with the first ring map.

1   13. The method of claim 12, and further comprising:

2   providing a first indication associated with the generating a first squelch entry;

3   providing a second indication associated with the generating a first squelch

4 entry.

1   14. A method for processing a squelch table for optical network

2 applications, the method comprising:

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3   receiving a first request message associated with a first cross-connection and a

4   first channel;

5   processing information associated with the first request message and a first

6   squelch table at a first node;

7   determining whether the first squelch table includes a first squelch entry

8   associated with the first channel;

9   if the first squelch table is free from the first squelch entry, sending a first

10   response message;

11   if the first squelch table includes the first squelch entry,

12   processing information associated with the first request message;

13   modifying the first squelch entry in response to at least information

14   associated with the first request message;

15   sending a second response message associated with the first cross-

16   connection.

1   15.   The method of claim 14 wherein the first response message is

2   associated with NO cross-connection.

1   16.   The method of claim 14 wherein the second response message

2   comprises a source node identification field associated with a source node related to the first

3   cross-connection and a destination node identification field associated with a destination node

4   related to the first cross-connection.

1   17.   The method of claim 16 wherein the second response message further

2   comprises a message identification field associated with a message identification.

1   18.   The method of claim 17 wherein the message identification is related

2   to at least one selected from a group consisting of AD, DR, DA, DD, NO, and NS.

1   19.   The method of claim 17 wherein the second response message further

2   comprises a request/response field indicating the second response message being a response.

1   20.   The method of claim 19 wherein the second response message further

2   comprises a direction field associated with a direction related to the second response

3   message, wherein the direction is west or east.

1   21.   The method of claim 20 wherein the second response message further

2   comprises a channel indicator associated with a channel identification corresponding to the

3   first squelch table.

1   22.   The method of claim 21 wherein the first request message further

2   comprises a VT indicator associated with a VT identification corresponding to the first

3   squelch table.

1   23.   The method of claim 14 wherein the first channel is a STS channel or a

2   VT channel.

1   24.   An apparatus for processing a squelch table for optical network

2   applications, the apparatus comprising:

3   a message receiver configured to

4   receive a first request message associated with a first cross-connection

5   and a first channel;

6   receive a first response message associated with a second cross-

7   connection and a second channel;

8   a message sender configured to

9   send a first request message associated with the second cross-

10   connection and the second channel;

11   send a first response message associated with the first cross-connection

12   and the first channel;

13   a memory system configured to store at least information associated with a

14   first squelch table;

15   a processing system coupled to the message receiver, the message sender, and

16   the memory system and is configured to

17   generate a first squelch entry associated with the second channel in the

18   first squelch table, the first squelch table free from any squelch entry associated with the

19   second channel other than the first squelch entry;

20   process information associated with the first response message;

21   modify the first squelch entry in response to at least information

22   associated with the first response message;

23   process information associated with the first request message and the

24   first squelch table;

25   determine whether the first squelch table includes a second squelch

26   entry associated with the first channel;

27   process information associated with the first request message;

28   modify the second squelch entry in response to at least information

29   associated with the first request message.

1   25.   The method of claim 24 wherein the first channel is a STS channel or a

2   VT channel.

1   26.   The method of claim 24 wherein the first channel and the second

2   channel are the same channel.

1   27.   The method of claim 24 wherein the first channel and the second

2   channel are different channels.